

WHAT IS CLAIMED IS:

1. A transmission device for a two dimensional (2D) image display module having a box with a top opening, a lens received in the box, a backboard sandwiched between a bottom face defining the top opening of the box and the lens and an image sandwiched between the lens and the backboard, the transmission device comprising:

- rods adapted to be arranged along a contour of the box;
- a transmission element slidably mounted around the rods;
- a motor adapted to be securely mounted in the box and having a disk rotatably connected to a motor shaft, a driving rod eccentrically formed on top of the disk and a driving board provided with a slot defined to receive therein the driving rod, distal ends of the transmission element are securely connected to the driving board; and
- at least one securing member securely connected to the transmission element to be adapted to connect to the backboard,

whereby rotation of the driving rod due to activation of the motor is able to drive the driving board to move a first direction, which drives the backboard to move via the transmission element and the securing member in a second direction opposite to the first direction so that the image is revealed as a result of relative movement between the backboard and the lens.

2. The transmission device as claimed in claim 1, wherein the transmission element is divided into a first transmission element having two distal ends securely connected to opposite sides on a top portion of the driving board and a second transmission element having two distal ends securely connected to opposite sides of a bottom portion of the driving board.

3. The transmission device as claimed in claim 2, wherein the rods are divided into top rods having the first transmission mounted therearound and bottom rods having

1 the second transmission element mounted therearound.

2 4. The transmission device as claimed in claim 3, wherein the driving board has
3 a top elongated hole and a bottom elongated hole respectively defined in a top portion
4 and a bottom portion of the driving board, two top guiding rods are adapted to be formed
5 in the box and extend through the top elongated hole and two bottom guiding rods are
6 adapted to be formed in the box and extend through the bottom elongated hole to ensure
7 smooth movement of the driving board.

8 5. A transmission device for a two dimensional (2D) image display module
9 having a box with a top opening, a lens received in the box, a backboard sandwiched
10 between a bottom face defining the top opening of the box and the lens and an image
11 sandwiched between the lens and the backboard, the transmission device comprising:
12 rods adapted to be arranged along a contour of the box;
13 a transmission element slidably mounted around the rods;
14 a motor adapted to be securely mounted in the box and having a disk rotatably
15 connected to a motor shaft, a driving rod eccentrically formed on top of the disk and a
16 driving board provided with a slot defined to receive therein the driving rod, distal ends
17 of the transmission element are securely connected to the driving board; and
18 at least one securing member securely connected to the transmission element to
19 be adapted to connect to the lens,
20 whereby rotation of the driving rod due to activation of the motor is able to drive
21 the driving board to move a first direction, which drives the lens to move via the
22 transmission element and the securing member in a second direction opposite to the first
23 direction so that the image is revealed as a result of relative movement between the
24 backboard and the lens.

25 6. The transmission device as claimed in claim 5, wherein the transmission

1 element is divided into a first transmission element having two distal ends securely
2 connected to opposite sides on a top portion of the driving board and a second
3 transmission element having two distal ends securely connected to opposite sides of a
4 bottom portion of the driving board.

5 7. The transmission device as claimed in claim 6, wherein the rods are divided
6 into top rods having the first transmission element mounted therearound and bottom
7 rods having the second transmission element mounted therearound.

8 8. The transmission device as claimed in claim 7, wherein the driving board has
9 the a top elongated hole and a bottom elongated hole respectively defined in a top
10 portion and a bottom portion of the driving board, two top guiding rods are adapted to be
11 formed in the box and extend through the top elongated hole and two bottom guiding
12 rods are adapted to be formed in the box and extend through the bottom elongated hole
13 to ensure smooth movement of the driving board.

14 9. A transmission device for a two dimensional (2D) image display module
15 having a box with a top opening, a lens received in the box, a backboard sandwiched
16 between a bottom face defining the top opening of the box and the lens and an image
17 sandwiched between the lens and the backboard, the transmission device comprising:

18 rods adapted to be arranged along a contour of the box;

19 transmission elements slidably mounted around the rods;

20 a motor adapted to be securely mounted in the box and having a disk rotatably
21 connected to a motor shaft, a driving rod eccentrically formed on top of the disk and a
22 driving board provided with a slot defined to receive therein the driving rod, distal ends
23 of the transmission element are securely connected to the driving board; and

24 securing members securely connected to the transmission element to be adapted
25 to connect to the lens or the backboard,

1 whereby rotation of the driving rod due to activation of the motor is able to drive
2 the driving board to move in a first direction, which drives the lens to move via the
3 transmission element and the securing member in a second direction opposite to the first
4 direction so that the image is revealed as a result of relative movement between the
5 backboard and the lens.

6 10. The transmission device as claimed in claim 9, wherein the rods are divided
7 to a first layer rods, a second layer rods and a third layer rods each having two distal
8 ends securely connected to the driving board, the transmission element is divided into a
9 first transmission element slidably mounted around the first layer rods, a second
10 transmission element slidably mounted around the second layer rods and a third
11 transmission element slidably mounted around the third layer rods.

12 11. The transmission device as claimed in claim 10, wherein the securing
13 members are divided to first, second and third securing members respectively mounted
14 on the first transmission element, second transmission element and third transmission
15 element for securing the lens or the backboard.